

Learning Research supporting StoryBuilding and Active Learning

Learning Research *From the work of James L. Barth*

The following approximate percentages of learning and retention (remembering) are based upon a summary of studies over the last fifty years. We learn and remember:

- 10% of what we hear
- 15% of what we see
- 20% of what we both see and hear
- 40% of what we discuss with others
- 80% of what we experience or practice
- 90% of what we teach others

Barth, James L. (1990). *Methods of Instruction and Learning in Social Studies* (3rd ed.). Washington, D.C.: University Press of America.

Brain Research *From the work of Geoffrey Caine and Nummela Caine*

- Learning engages the entire physiology
- The search for meaning is innate and occurs through “patterning”
- Emotions are critical to “patterning”
- Each brain is unique, and simultaneously perceives and creates parts and wholes
- Learning involves both focused attention and peripheral perception
- Learning involves both a conscious and unconscious process
- The brain generates two types of memory: spatial and rote learning
- The brain understands and remembers best when facts and skills are imbedded in natural spatial memory

Multiple Intelligences *From the work of Howard Gardner*

Eight distinct orientations to learning have been identified as multiple intelligences:

- **Verbal-Linguistic**, emphasizing the use of language and words
- **Logical-Mathematical**, emphasizing logic and reasoning
- **Visual-Spatial**, emphasizing mental images
- **Bodily-Kinesthetic**, emphasizing physical activity
- **Musical-Rhythmic**, emphasizing non-verbal sounds and patterns
- **Interpersonal**, emphasizing feelings and social interaction
- **Intrapersonal**, emphasizing self knowledge
- **Naturalist**, emphasizing connections to the natural world

Gardner, Howard (1993). *Multiple Intelligences: the Theory in Practice*. New York: Basic Books.

Constructivist Classrooms *From Jacqueline G. and Martin G. Brooks*

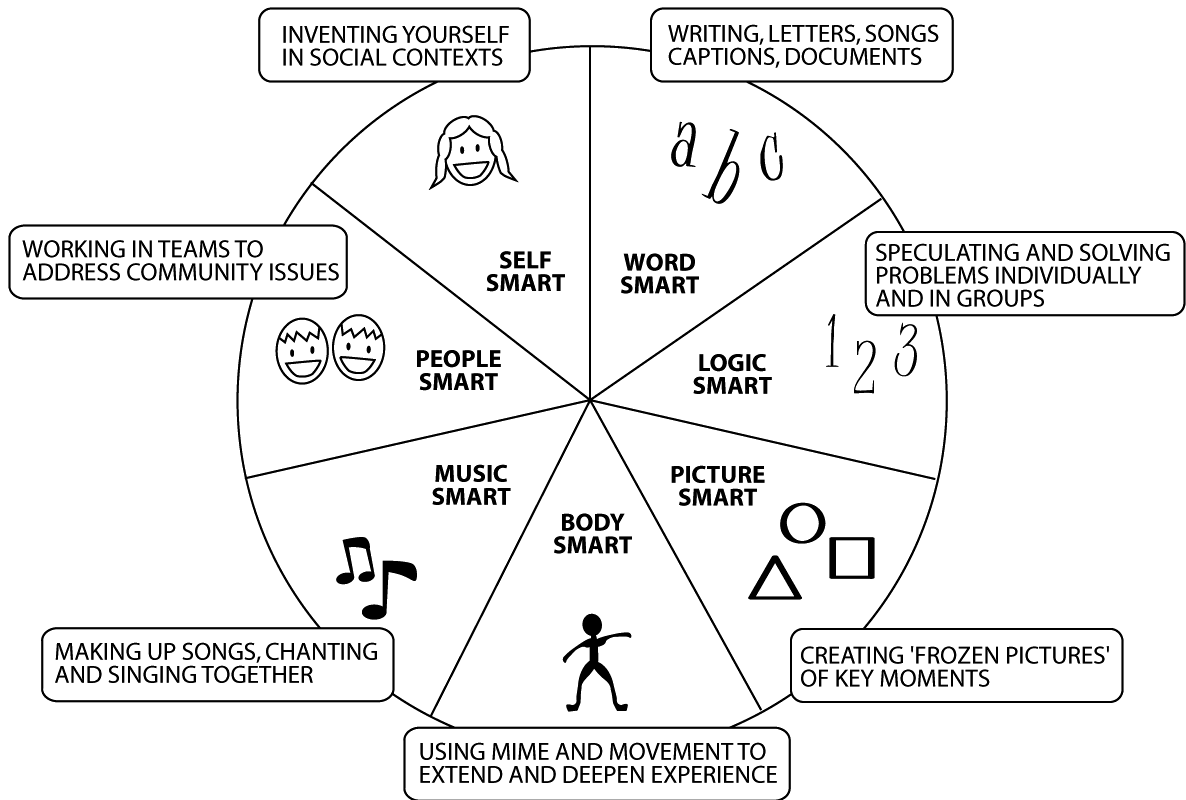
- Curriculum is presented whole to part, with emphasis on big concepts
- Students are empowered as theorists and questioners
- Teachers are facilitators, mediating student activities and seeking their viewpoints
- Students work in groups
- Curriculum is experiential, relying on primary sources and manipulatives
- Assessment is conducted through observations, exhibits and portfolios

Emotional Intelligence *From Daniel Goleman*

- Identifying, labeling, expressing feelings
- Assessing the intensity of feelings and managing them
- Knowing the difference between feelings and actions
- Collaborating with others and interpreting social cues
- Developing empathy, understanding the perspective of others

Goleman, Daniel (1995). *Emotional Intelligence: Why It Can Matter More Than IQ*. New York: Bantam Books.

STORYBUILDING ENGAGES MULTIPLE INTELLIGENCES IN THESE WAYS:



GENERAL TECHNIQUES

Dynamic classroom organization
High order thinking
Questioning
Active / reflective engagement

THEATRE TECHNIQUES

Teacher-in-role
Mantle of the expert
Enactments
Frozen pictures